

**PATENT COOPERATION TREATY**  
**PCT**  
**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**  
(Chapter II of the Patent Cooperation Treaty)  
(PCT Article 36 and Rule 70)

Applicant's or agent's file reference FP21311	<b>FOR FURTHER ACTION</b>		See Form PCT/IPEA/416
International application No. PCT/AU2005/000426	International filing date ( <i>day/month/year</i> ) 24 March 2005	Priority date ( <i>day/month/year</i> ) 25 March 2004	
International Patent Classification (IPC) or national classification and IPC Int. Cl. See additional sheet			
Applicant INTEC LTD et al			

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 4 sheets, including this cover sheet.

3. This report is also accompanied by ANNEXES, comprising:

a. ☒ (*sent to the applicant and to the International Bureau*) a total of 20 sheets, as follows:

☒ sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).

☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.

b. ☐ (*sent to the International Bureau only*) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or table related thereto, in electronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

<input checked="" type="checkbox"/>	Box No. I	Basis of the report
<input type="checkbox"/>	Box No. II	Priority
<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
<input type="checkbox"/>	Box No. IV	Lack of unity of invention
<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
<input type="checkbox"/>	Box No. VI	Certain documents cited
<input type="checkbox"/>	Box No. VII	Certain defects in the international application
<input type="checkbox"/>	Box No. VIII	Certain observations on the international application

Date of submission of the demand 25 January 2006	Date of completion of this report 15 March 2006
Name and mailing address of the IPEA/AU AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaaustralia.gov.au Facsimile No. (02) 6285 3929	Authorized Officer  A Davies Telephone No. (02) 6283 2072

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/AU2005/000426

## Box No. I Basis of the report

1. With regard to the language, this report is based on:

- ☒ The international application in the language in which it was filed
- ☐ A translation of the international application into \_\_\_\_\_, which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3(a) and 23.1 (b))
  - ☐ publication of the international application (under Rule 12.4(a))
  - ☐ international preliminary examination (Rules 55.2(a) and/or 55.3(a))

2. With regard to the elements of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):

- ☐ the international application as originally filed/furnished
- ☒ the description:  
pages 1,8,9,11,13,18-32 as originally filed/furnished  
pages\* 2-7,7a,10,12,14-17 received by this Authority on 28 February 2006 with the letter of same pages\* received by this Authority on \_\_\_\_\_ with the letter of \_\_\_\_\_
- ☒ the claims:  
pages \_\_\_\_\_ as originally filed/furnished  
pages\* \_\_\_\_\_ as amended (together with any statement) under Article 19  
pages\* 33-38 received by this Authority on 28 February 2006 with the letter of 28 February 2006.  
pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_ with the letter of \_\_\_\_\_
- ☒ the drawings:  
pages 1-3 as originally filed/furnished  
pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_ with the letter of \_\_\_\_\_  
pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_ with the letter of \_\_\_\_\_
- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to the sequence listing (*specify*): \_\_\_\_\_

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to the sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.  
PCT/AU2005/000426

**Box No. V** Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

## 1. Statement

Novelty (N)	Claims 1-34	YES
	Claims	NO
Inventive step (IS)	Claims 1-34	YES
	Claims	NO
Industrial applicability (IA)	Claims 1-34	YES
	Claims	NO

## 2. Citations and explanations (Rule 70.7)

US 5232490 A (BENDER ET AL.) 3 August 1993

WO 2001/012865 A1 (OUTOKUMPU OYJ) 22 February 2001

None of the above citations alone or in combination render the invention defined by the claims not novel or un inventive.

The inventions defined by the amended claim 1 defines a multistep process for the recovery of a metal from an oxidised metalliferous material comprising adding sulphuric acid to a metal halide to generate an acidic aqueous halide solution, leaching the oxidised metalliferous material with the acidic aqueous halide solution, recovering the target metal while leaving the metal halide in solution and returning the metal halide to the first step.

US 5232490 represents the closer art. It teaches a process for the recovery of precious metals which requires the addition of MnO<sub>2</sub>, a reductant or mixtures thereof and conducting acid leaching in the presence of these materials.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

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Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of:

International Patent Classification (IPC) or national classification and IPC

<i>C22B 3/00</i> (2006.01)	<i>C22B 11/00</i> (2006.01)	<i>C22B 23/00</i> (2006.01)
<i>C22B 3/06</i> (2006.01)	<i>C22B 11/06</i> (2006.01)	<i>C22B 23/06</i> (2006.01)
<i>C22B 3/08</i> (2006.01)	<i>C22B 15/00</i> (2006.01)	<i>C22B 26/22</i> (2006.01)
<i>C22B 3/10</i> (2006.01)	<i>C22B 15/14</i> (2006.01)	<i>C22B 30/04</i> (2006.01)
<i>C22B 7/02</i> (2006.01)	<i>C22B 19/00</i> (2006.01)	